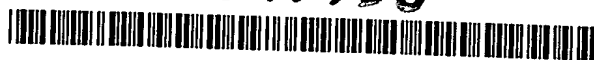


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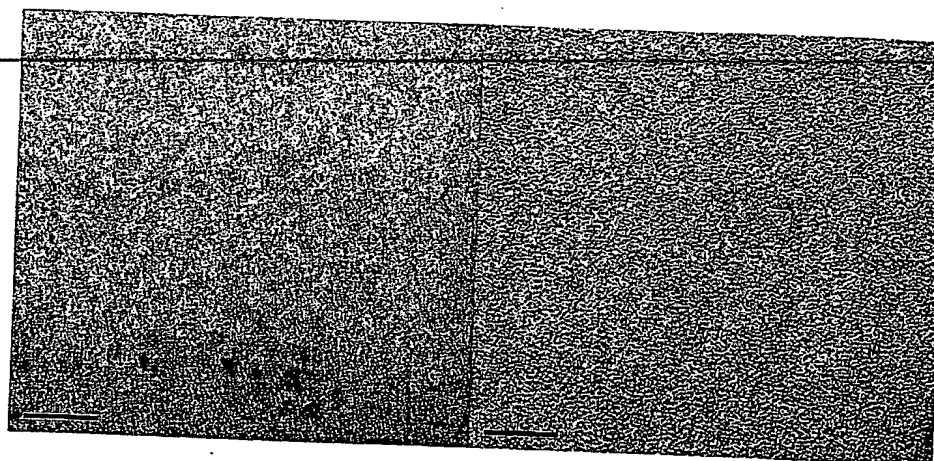
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(54) Title: METAL OXIDE-CONTAINING NANOPARTICLES



TEM of pyridine-protected Cu₂O nanoparticles

(57) Abstract: The present invention provides a copper oxide-containing composition that includes copper oxide nanoparticles and one or more heteroatom donor ligands bonded to the surface of the nanoparticles, where x and y are numbers having a ratio that is equal to the ratio of the average number of M atoms to the average number of O atoms in the nanoparticles. The nanoparticles are stabilized by the one or more heteroatom donor ligands which act as a protective layer that cap the surface of the nanoparticles. The present invention also provides a solution of the copper oxide nanoparticles that may be applied to a substrate and then subsequently reduced to copper metal. Finally, the invention provides a method of preparing the copper oxide nanoparticles.

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